

REMARKS

By the above amendment in the accompanying RCE, all pending claims, whether or not standing withdrawn from consideration as being based upon a non-elected invention, have been canceled without prejudice or disclaimer of the subject matter thereof, it being noted that the claims which stand withdrawn from consideration has been canceled without prejudice to the right to file a divisional application directed thereto. Further, by the present amendment, new claims 67-72 directed to the apparatus of the claimed invention have been presented, reciting features of a planar plate having a plurality of through holes through which a source material gas is supplied to the vacuum chamber, while specifying the distance between the planar plate and the sample held on the sample stage. Independent claim 67, which is the only independent claim presented, recites other features of the present invention, including the planar plate being disposed in parallel with the sample stage in the vacuum chamber, a first power source for applying a bias to the planar plate, a second power source for applying a bias to the sample stage with gas supplying means supplying the source material gas into the plasma generated in the vacuum chamber, and applicants submit that the claimed features as set forth in independent claim 67 and the dependent claims are not disclosed or taught in the cited art, as will become clear from the following discussion.

Applicants note that dependent claims 68-72 recite further features of the present invention. As described in the specification of this application, the planar plate supplies the source material gas which is an etching gas through the plurality of holes therein uniformly on the sample and the first power source applies a voltage to the planar plate so as to consume radicals included in the plasma produced between the planar plate and the sample. Further, the distance between the sample and the planar plate is set so as to arrange the sample in the plasma region with a suitable quantity of radicals as described in connection with Figs. 2 and 5 and as now defined

in claim 67, whereby the combination of the aforementioned recited features enable radicals within the plasma to be controlled independently of the plasma generating condition so as to expand the process control range, as described at page 12, lines 6-11, for example. Applicants note that the dependent claims recite further features of the present invention with claim 68, reciting the feature of a ring-shaped member disposed at a periphery of the sample stage, with the second power source being connected to the ring-shaped member, and claim 72, for example, reciting the feature of means for dividing a power from the second power source so as to supply one part to the sample stage and another part to the ring-shaped member. As described in the specification of this application, such features and other features contribute to improved operation, which features are not disclosed or taught in the cited art.

As to the rejection of claims 1-8, 10-12, 14, 16-29, 31-34, 36, 50-53 and 55-64 under 35 U.S.C. 103(a) as being unpatentable over Yokogawa et al, JP 9-321031 in view of Collins et al, U.S. Patent 6,068,784, further in view of Kaji et al, EP 0 793 254 A2 and further in view of Toshihisa et al, JP 07-310187, Collins et al, U.S. Patent 6,054,013, or Collins et al, U.S. Patent 6,074,512 and the rejection of claim 9 over the aforementioned references further in view of Gupta et al, U.S. Patent 5,902,494, applicants submit such rejections have been obviated by the cancellation of the aforementioned claims, and insofar as such rejections are applicable to newly presented claims 67-72, such rejections are traversed, and reconsideration and withdrawal of the rejections are respectfully requested.

Applicants submit that none of Yokogawa et al, JP 9-321031, Collins et al, U.S. Patent 6,068,784, Kaji et al, EP 0 793 254 A2, Toshihisa et al. JP 07-310187, Collins et al, U.S. Patent 6,054,013, and Collins et al, U.S. Patent 6,074,512, disclose or teach a planar plate including a plurality of holes, and having the source material gas supplied through the plurality of holes into the plasma generated in the

vacuum chamber irrespective of whether or not the combination of references utilized by the Examiner may possibly be considered to reconstruct the other claimed features of claim 67 and the dependent claims thereof. In this regard, it is noted that the Examiner has utilized a minimum of five references in any one rejection of the prior claims, and applicants submit that the utilization of five references is evidence of the Examiner picking and choosing bits and pieces from the individual references in order to attempt to reconstruct the claimed invention.

Applicants note that the Examiner has additionally cited the patent to Gupta et al, U.S. Patent 5,902,494, as utilized in the rejection of claim 9, as disclosing a plasma apparatus in which the Examiner contends that a planar plate 11 which is a gas manifold has gas introduced to the processing chamber. Applicants note that Gupta et al would represent a minimum of a sixth reference in combination with five references for which the Examiner picks out another feature in order to reconstruct the claimed invention, and applicants submit that the Examiner has engaged in a hindsight reconstruction attempt, utilizing the principle of "obvious to try" which is not the standard of 35 U.S.C. 103. Reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court pointed out that the PTO has the burden under §103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. Thus, applicants submit that the rejection as set forth by the Examiner is

improper, and claim 67 and its dependent claims should be considered allowable thereover.

Applicants further note that contrary to the position set forth by the Examiner, it is not seen that the gas manifold 11 of Gupta et al is a planar plate having a plurality of holes through which the source material gas is supplied into the plasma generated in the vacuum chamber, with a first power source applying a bias to the planar plate as recited in claim 67. The Examiner contends "it would have been obvious" to modify the other cited art to provide the claimed features. It is noted, however, that Gupta et al and Collins et al, U.S. Patent No. 6,054,013, as utilized by the Examiner, are assigned to the same assignee "Applied Materials Inc.", with Collins et al, U.S. Patent No. 6,054,013 being filed on October 24, 1996, almost eight (8) months after the February 9, 1996 filing of Gupta et al, such that it is apparent that Collins et al, U.S. Patent No. 6,054,013, was aware of the utilization of a gas manifold as disclosed by Gupta et al, but Collins et al did not utilize the same in the invention thereof. Applicants submit that the position by the Examiner is necessarily a hindsight reconstruction attempt, since Collins et al obviously rejected the utilization of a gas manifold as disclosed by Gupta et al in the disclosed construction of Collins et al. Thus, applicants submit that it is not "obvious" as contended by the Examiner, but rather the rejection as set forth by the Examiner is a hindsight reconstruction attempt in which the Examiner has utilized the teachings of the present invention against its teacher, which is not permissible. See In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002). Thus, applicants submit that claim 67 and its dependent claims patentably distinguish over the cited art as utilized in the prior rejections and should be considered allowable thereover.

In view of the above amendments and remarks, applicants request favorable action in this application.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (500.37328CX1) and please credit any excess fees to such deposit account.

Respectfully submitted,



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